L Number	Hits	Search Text	DB	Time stamp
1	2529	((568/644) or (568/646) or (568/648) or (568/322) or	USPAT;	2004/03/16 05:49
		(568/315) or (568/316) or (568/318) or (568/323) or	US-PGPUB;	
		(568/324)).CCLS.	EPO; JPO;	
			DERWENT	
2	1456	"2,3-dichloro-5,6-dicyano-1,4-benzoquinone"	USPAT;	2004/03/16 05:49
			US-PGPUB;	
			EPO; JPO;	
			DERWENT	
3	2362	dichlorodicyanoquinone or ddq!	USPAT;	2004/03/16 05:50
			US-PGPUB;	
			EPO; JPO;	
•			DERWENT	
4	18	(((568/644) or (568/646) or (568/648) or (568/322) or	USPAT;	2004/03/16 06:06
		(568/315) or (568/316) or (568/318) or (568/323) or	US-PGPUB;	
	1	(568/324)).CCLS.) and	EPO; JPO;	
		("2,3-dichloro-5,6-dicyano-1,4-benzoquinone" or	DERWENT	
		(dichlorodicyanoquinone or ddq!))		
5	67	"2,4,5-trimethoxyphenylpropane" or	USPAT;	2004/03/16 06:07
		"1-propyl-2,4,5-trimethoxybenzene" or neolignan	US-PGPUB;	
			EPO; JPO;	
			DERWENT	
6	10	("2,4,5-trimethoxyphenylpropane" or	USPAT;	2004/03/16 06:07
		"1-propyl-2,4,5-trimethoxybenzene" or neolignan) and	US-PGPUB;	
		("2,3-dichloro-5,6-dicyano-1,4-benzoquinone" or	EPO; JPO;	
		(dichlorodicyanoquinone or ddq!))	DERWENT	

1 Number	Llite	Search Text	DB	Time stamp
L Number	Hits	Sedicifiex	00	
1	24	sinha-arun-kumar.in. or joshi-bhupendra-prasad.in. or	USPAT;	2004/03/16 06:56
		acharya-ruchi.in.	US-PGPUB;	
		,	EPO; JPO;	
			DERWENT	

Connecting via Winsock to STN

```
Welcome to STN International! Enter x:x
```

LOGINID: SSSPTA1204RXW

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS
     1
                 "Ask CAS" for self-help around the clock
NEWS
     2
                 CA/CAplus records now contain indexing from 1907 to the
NEWS
        SEP 09
                 present
                 INPADOC: Legal Status data reloaded
    4 DEC 08
NEWS
NEWS 5 SEP 29
                DISSABS now available on STN
NEWS 6 OCT 10
                PCTFULL: Two new display fields added
                BIOSIS file reloaded and enhanced
NEWS 7 OCT 21
                BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 8 OCT 28
NEWS 9 NOV 24
                MSDS-CCOHS file reloaded
NEWS 10 DEC 08
                 CABA reloaded with left truncation
NEWS 11 DEC 08
                 IMS file names changed
                 Experimental property data collected by CAS now available
NEWS 12
        DEC 09
                 in REGISTRY
                 STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS 13 DEC 09
        DEC 17
                 DGENE: Two new display fields added
NEWS 14
NEWS 15 DEC 18
                 BIOTECHNO no longer updated
                 CROPU no longer updated; subscriber discount no longer
NEWS 16
        DEC 19
                 available
                 Additional INPI reactions and pre-1907 documents added to CAS
         DEC 22
NEWS 17
                 databases
                 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
         DEC 22
NEWS 18
         DEC 22
                 ABI-INFORM now available on STN
NEWS 19
                 Source of Registration (SR) information in REGISTRY updated
NEWS 20
         JAN 27
                 and searchable
                 A new search aid, the Company Name Thesaurus, available in
         JAN 27
NEWS 21
                 CA/CAplus
                 German (DE) application and patent publication number format
NEWS 22
         FEB 05
                 changes
NEWS 23
         MAR 03
                 MEDLINE and LMEDLINE reloaded
                 MEDLINE file segment of TOXCENTER reloaded
NEWS 24
         MAR 03
                 FRANCEPAT now available on STN
NEWS 25
         MAR 03
             MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
NEWS EXPRESS
              MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
              AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
              STN Operating Hours Plus Help Desk Availability
NEWS HOURS
              General Internet Information
NEWS INTER
              Welcome Banner and News Items
NEWS LOGIN
              Direct Dial and Telecommunication Network Access to STN
NEWS PHONE
NEWS WWW
              CAS World Wide Web Site (general information)
```

Enter NEWS followed by the item number or name to see news on that specific topic.

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agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 06:40:02 ON 16 MAR 2004

=> FIL STNGUIDE
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 06:40:30 ON 16 MAR 2004
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 12, 2004 (20040312/UP).

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.36 0.57

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 06:44:00 ON 16 MAR 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 MAR 2004 HIGHEST RN 663595-21-9 DICTIONARY FILE UPDATES: 15 MAR 2004 HIGHEST RN 663595-21-9

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END): end

- => screen 1992 OR 2007 OR 2016 OR 2021 OR 2026 OR 1929 OR 1839
- L1 SCREEN CREATED

=> Uploading C:\Program Files\Stnexp\Queries\10660556b.str

chain nodes:
7 8 9 10 11 12
ring nodes:
1 2 3 4 5 6
chain bonds:
1-9 2-8 4-7 5-10 10-11 11-12
ring bonds:
1-2 1-6 2-3 3-4 4-5 5-6
exact bonds:
1-9 2-8 4-7 5-10 10-11 11-12
normalized bonds:
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems:
containing 1:

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS

L2 STRUCTURE UPLOADED

=> que L2 NOT L1

L3 QUE L2 NOT L1

=> d

L3 HAS NO ANSWERS

L1 SCR 1992 OR 2007 OR 2016 OR 2021 OR 2026 OR 1929 OR 1839

L2 STR

Structure attributes must be viewed using STN Express query preparation. L3 $\,$ QUE L2 NOT L1 $\,$

=> s l3 ful FULL SEARCH INITIATED 06:44:46 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 94 TO ITERATE

100.0% PROCESSED 94 ITERATIONS SEARCH TIME: 00.00.01

7 ANSWERS

L4

7 SEA SSS FUL L2 NOT L1

=> d scan 1-7
'1-7' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

L4 7 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN IN Benzene-d, 3-dodecyl-2,5,6-trimethoxy- (9CI) MF C21 H35 D O3

$$\begin{array}{c} \text{MeO} & \text{(CH}_2)_{11} - \text{Me} \\ \\ \text{MeO} & \text{OMe} \\ \\ \text{D} & \end{array}$$

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN

SAM - Index Name, MF, and structure - no RN FIDE - All substance data, except sequence data

IDE - FIDE, but only 50 names SQIDE - IDE, plus sequence data

SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used

SQD - Protein sequence data, includes RN

SQD3 - Same as SQD, but 3-letter amino acid codes are used

SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties
EPROP - Table of experimental properties

PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract

APPS -- Application and Priority Information

BIB -- CA Accession Number, plus Bibliographic Data

CAN -- CA Accession Number

CBIB -- CA Accession Number, plus Bibliographic Data (compressed)

IND -- Index Data

IPC -- International Patent Classification

PATS -- PI, SO

STD -- BIB, IPC, and NCL

IABS --ABS, indented, with text labels

IBIB -- BIB, indented, with text labels

ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)

OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations

SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields. HELP FORMATS -- To see detailed descriptions of the predefined formats. HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> dscan

DSCAN IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> d scan

L4 7 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Benzene, 1,2,4-trimethoxy-5-pentyl- (9CI)

MF C14 H22 O3

MeO (CH₂)₄
$$-$$
 Me OMe

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):6

7 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN Benzene-d, 3-dodecyl-2,5,6-trimethoxy- (9CI) L4

IN

MF C21 H35 D-O3

$$\begin{array}{c} \text{MeO} & \text{(CH}_2)_{11}\text{-Me} \\ \\ \text{MeO} & \text{OMe} \\ \\ \text{D} & \\ \end{array}$$

REGISTRY COPYRIGHT 2004 ACS on STN L4

Benzene, 1-dodecyl-2,4,5-trimethoxy- (9CI) IN

C21 H36 O3 MF

$$\begin{array}{c} \text{MeO} & \text{(CH}_2)_{11}\text{-Me} \\ \\ \text{MeO} & \text{OMe} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

REGISTRY COPYRIGHT 2004 ACS on STN L47 ANSWERS

Benzene, 1-hexyl-2,4,5-trimethoxy- (9CI) IN

MF C15 H24 O3

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

REGISTRY COPYRIGHT 2004 ACS on STN L47 ANSWERS

Benzene, 1-butyl-2,4,5-trimethoxy- (9CI) IN

MF C13 H20 O3

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 7 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN IN Benzene, 1,3-didodecyl-2,4,5-trimethoxy- (9CI)

MF C33 H60 O3

MeO
$$(CH_2)_{11}-Me$$

OMe
 $(CH_2)_{11}-Me$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 7 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Benzene, 1,2,4-trimethoxy-5-propyl- (7CI, 8CI, 9CI)

MF C12 H18 O3

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 1994 OR 2006 OR 2016 OR 2021 OR 2026 OR 1938 OR 1968 OR 1985 OR 1839

L5 SCREEN CREATED

=>
Uploading C:\Program Files\Stnexp\Queries\10660556a.str

chain nodes : 7 8 9 10 11

 $7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14$

ring nodes :

1 2 3 4 5 6

chain bonds :

1-7 2-12 3-11 4-8 5-10 6-9 11-13 12-14

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

1-7 4-8 11-13 12-14

exact bonds :

1-2 1-6 2-3 2-12 3-4 3-11 4-5 5-6 5-10 6-9

isolated ring systems :

containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS

10

`9

L6 STRUCTURE UPLOADED

=> que L6 NOT L5

L7 QUE L6 NOT L5

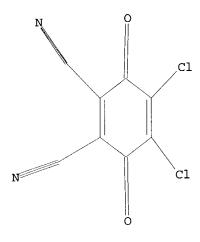
=> d

L7 HAS NO ANSWERS

L5 SCR 1994 OR 2006 OR 2016 OR 2021 OR 2026 OR 1938 OR 1968 O

R 1985 OR 1839

L6 STR



Structure attributes must be viewed using STN Express query preparation. L7 $\,$ QUE $\,$ L6 NOT L5 $\,$

=> s 17 ful

FULL SEARCH INITIATED 06:46:56 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 178 TO ITERATE

100.0% PROCESSED 178 ITERATIONS

165 ANSWERS

SEARCH TIME: 00.00.01

L8 165 SEA SSS FUL L6 NOT L5

=> s 17 ful css

FULL SEARCH INITIATED 06:47:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 178 TO ITERATE

100.0% PROCESSED 178 ITERATIONS

165 ANSWERS

SEARCH TIME: 00.00.01

L9 165 SEA CSS FUL L6 NOT L5

=> d scan

L9 165 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 1,4-Cyclohexadiene-1,2-dicarbonitrile, 4,5-dichloro-3,6-dioxo-, compd.
with 4-methylpyridine 1-oxide (1:1) (9CI)

MF C8 C12 N2 O2 . C6 H7 N O

CM 1

CM 2

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d his

(FILE 'HOME' ENTERED AT 06:40:02 ON 16 MAR 2004)

FILE 'STNGUIDE' ENTERED AT 06:40:30 ON 16 MAR 2004

FILE 'REGISTRY' ENTERED AT 06:44:00 ON 16 MAR 2004 SCREEN 1992 OR 2007 OR 2016 OR 2021 OR 2026 OR 1929 OR 18 L1 L2 STRUCTURE UPLOADED OUE L2 NOT L1 L3 7 S L3 FUL L4SCREEN 1994 OR 2006 OR 2016 OR 2021 OR 2026 OR 1938 OR 19 L5 STRUCTURE UPLOADED L6 L7 QUE L6 NOT L5 165 S L7 FUL Ь8 165 S L7 FUL CSS Ь9

=> file caplus uspatful COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
467.94 468.51

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 06:48:06 ON 16 MAR 2004
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COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 06:48:06 ON 16 MAR 2004 CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=> s 14

L10 19 L4

=> s 18

L11 1777 L8

=> s 110 and 111

L12 8 L10 AND L11

=> d 1-8 bib ab

L12 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:777737 CAPLUS

DN 139:292100

TI Formation of neolignan by DDQ mediated dimerization of dihydroasarone

IN Sinha, Arun Kumar; Joshi, Bhupendra Prasad; Acharya, Ruchi

PA Council of Scientific and Industrial Research, India

SO PCT Int. Appl., 37 pp. CODEN: PIXXD2

PA

```
DT
     Patent
LΑ
     English
FAN.CNT 1
                        KIND DATE
                                                APPLICATION NO. DATE
     PATENT NO.
                         ____
                               _____
                                                 -----
                                                                    _____
                                               WO 2002-IN73
     WO 2003080551 A1 20031002
                                                                    20020327
PΙ
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
              TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI WO 2002-IN73
                                20020327
OS
     CASREACT 139:292100
     The present invention relates to a novel neolignan 3-ethyl-2-methyl-3-
ΑB
      (2'',4'',5''-trimethoxyphenyl)-1-(2',4',5'-trimethoxyphenyl)-1-propene and
     a process for the preparation of high purity, high yield neolignan,
     \alpha-asarone, and 2,4,5-trimethoxyphenylpropionone from \beta-asarone
     or \beta-asarone rich Acorus calamus oil containing \alpha- and
     \gamma\text{-asarone} by hydrogenating and dimerizing by treatment with DDQ in
     presence of an organic acid.
                THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 4
                ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
L12
     2003:777446 CAPLUS
ΔN
DN
     139:292099
     DDQ-mediated one step dimerization of \beta-asarone or \beta-asarone
TI
      rich Acorus calamus oil in the formation of novel neolignan
IN
      Sinha, Arun Kumar; Joshi, Bhupendra Prasad; Acharya, Ruchi
     Council of Scientific & Industrial Research, India
PΆ
SO
     U.S. Pat. Appl. Publ., 20 pp.
      CODEN: USXXCO
DT
     Patent
     English
LA
FAN.CNT 1
      PATENT NO. KIND DATE
                                               APPLICATION NO. DATE
                        ----
                                                 _____
      _____
                               20031002
                                                 US 2002-108269
                                                                     20020328
     US 2003187306 A1
PI
US 2004049085 A1 20040311
PRAI US 2002-108269 B3 20020328
                                                 US 2003-660556 20030912
     CASREACT 139:292099
OS
     The present invention relates to a novel neolignan, 3-ethyl-2-methyl-3-
AΒ
      (2'',4'',5''-trimethoxyphenyl)-1-(2',4',5'-trimethoxyphenyl)-1-(2',4',5'-
      trimethoxy)phenyl-1-propene [NEOLASA-I (I)], and a process for the preparation
      of high purity, higher yield neolignan, \alpha-asarone,
      2,4,5-trimethoxy-phenylpropionone from \beta-asarone (II) or
      \beta-asarone rich Acorus calamus oil containing \alpha- and \gamma-asarone
      by hydrogenating and dimerizing by treatment with DDQ in presence of an
      organic acid.
     ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
L12
      2003:524051 CAPLUS
AN
DN
      139:90404
TI
      Process for the preparation of pharmacologically active \alpha-asarone
      from toxic \beta-asarone-rich Acorus calamus oil
      Sinha, Arun Kumar; Joshi, Bhupendra Prasad; Acharya, Ruchi
IN
```

Council of Scientific & Industrial Research, India

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10/660,556
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SO
    U.S., 22 pp.
    CODEN: USXXAM
DT
    Patent
LA
    English
FAN.CNT 1
                                         APPLICATION NO. DATE
    PATENT NO.
                     KIND DATE
                                         -----
     ______
                     _ _ _ _
                          _____
    US 6590127
                                         US 2002-107844
                     B1
                           20030708
                                                           20020328
PΙ
                     A1
                                         WO 2002-IN94
                                                           20020328
    WO 2003082786
                           20031009
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            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
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        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2002-107844
                     Α
                           20020328
    The present invention relates to a process for the preparation of high purity
     and yield α-asarone, trans-2,4,5-trimethoxycinnamaldehyde, and
     2,4,5-trimethoxyphenylpropanone, from \beta-asarone or
     \beta-asarone-rich Acorus calamus oil containing \alpha and \gamma-asarone
    by hydrogenation, followed by treatment with a dehydrogenating agent
     dichlorodicyanobenzoquinone (DDQ) with or without solid support of silica
     gel or alumina in dry organic solvent. \alpha-Asarone can also be obtained
    by treating the hydrogenated product of \beta-asarone or
    \beta-asarone-rich A. calamus oil with DDQ in an aqueous organic solvent to
     obtain an intermediate 2,4,5-trimethoxyphenylpropanone, which in turn is
     reduced with sodium borohydride to obtain the corresponding
     2,4,5-trimethoxyphenylpropanol and followed by final treatment with a
     dehydrating agent.
RE.CNT 91
             THERE ARE 91 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
L12
AN
     2002:717107 CAPLUS
     137:234008
DN
     Production of substituted trans-cinnamaldehydes and yellow dyes from
TI
     phenylpropane derivatives
     Sinha, Arun Kumar; Joshi, Bhupendra Prasad; Dogra, Ruchi
IN
PA
     India
     U.S. Pat. Appl. Publ., 15 pp.
SO
     CODEN: USXXCO
DT
     Patent
LA
    English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                                          -----
                           _____
    US 2002133045
                           20020919
                                          US 2001-805832
                                                           20010314
ΡI
                     A1
     US 6566557
                      B2
                           20030520
                                          GB 2001-6430
                                                           20010315
    GB 2373252
                      A1
                           20020918
     DE 10113506
                      A1
                           20020926
                                          DE 2001-10113506 20010320
                                          BR 2001-3269
                                                           20010322
     BR 2001003269
                      Α
                           20021203
                                          FR 2001-3984
                                                           20010323
     FR 2822473
                      Α1
                           20020927
     WO 2002072709
                     A1
                           20020919
                                          WO 2001-IN104
                                                           20010521
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SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,

Exemplary Claim: 1

ECL

```
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-805832
                      Α
                            20010314
     CASREACT 137:234008; MARPAT 137:234008
     The invention relates to the production of substituted trans-cinnamaldehydes
AB
     (I, R1 = trans-CH:CHCHO; R2, R3, R4, R5, R6 = H, alkyl, alkoxy, or
     adjacent groups may form methylenedioxy) by oxidizing the corresponding
     phenylpropane derivs. using an oxidizing agent such as
     2,3-dichloro-5,6-dicyano-1,4-benzoquinone (DDQ), p-chloranil, pyridinium
     chlorochromate, tert-BuOOH, or CrO3 with a catalytic amount of inorg./organic
     acid (optionally on alumina, celite, and silica gel as a solid support for
     microwave irradiation); the trans-cinnamaldehydes and natural yellow dyes are
     obtained in high yield ranging from 68-82%. In an example, yellow
     2,4,5-trimethoxycinnamaldehyde was obtained in 84% yield by oxidation of
     1-(2,4,5-trimethoxyphenyl) propane in the presence of DDQ and acetic acid.
    ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
L12
AN
     2002:710993 CAPLUS
DN
     137:249076
     Process for preparation of substituted trans-cinnamaldehyde, a natural
ΤI
     yellow dye, from phenylpropane derivatives
     Sinha, Arun Kumar; Joshi, Virendara Prasad; Dogura, Ruci
IN
     Council of Scientific & Industrial Research, India
PΑ
     Jpn. Kokai Tokkyo Koho, 45 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 1
                                          APPLICATION NO. DATE
                      KIND DATE
     PATENT NO.
     ______
                                           ______
     JP 2002265407
                      A2
                            20020918
                                           JP 2001-68716
                                                            20010312
PΙ
PRAI JP 2001-68716
                            20010312
     CASREACT 137:249076; MARPAT 137:249076
     A simple and economical process to convert phenylpropane derivs. into
     corresponding cinnamaldehyde derivs. comprises oxidizing substituted
     phenylpropane derivs. in presence of a solvent and a catalyst using an
     oxidizing agent in a mole ratio of 1:1 to 1:8 to the phenylpropane derivs.
     at a temperature between -15° to 210° for a period of 30 min to 48
     h, removing the solvent under reduced pressure and isolating the product
     to obtain 68-82% of trans-cinnamaldehydes. Thus, a flask containing a mixture
     of 4-methoxyphenylpropane 2, silica gel 0.5-0.8, 2,3-dichloro-5,6-dicyano-
     1,4-benzoquinone (DDQ) 7.5 g and 5-8 mL dioxane was placed inside a
     microwave oven operating at medium power (600 W) and irradiated for 2-8
     min to give 68% 4-methoxycinnamaldehyde.
     ANSWER 6 OF 8 USPATFULL on STN
T-12
       2003:266288 USPATFULL
ΑN
       DDQ mediated one step dimerisation of beta-asarone or beta-asarone rich
TТ
       acorus calamus oil in the formation of novel neolignan
       Sinha, Arun Kumar, Himachal Pradesh, INDIA
IN
       Joshi, Bhupendra Prasad, Himachal Pradesh, INDIA
       Acharya, Ruchi, Himachal Pradesh, INDIA
       Council of Scientific & Industrial Research (non-U.S. corporation)
PA
                               20031002
PΙ
       US 2003187306
                         Δ1
       US 2002-108269
                          A1
                               20020328 (10)
ΑI
דת
       Utility
ES
       APPLICATION
       FOLEY AND LARDNER, SUITE 500, 3000 K STREET NW, WASHINGTON, DC, 20007
LREP
CLMN
       Number of Claims: 22
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9 Drawing Page(s)
DRWN
LN.CNT 1004
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a novel neolignan (NEOLASA-I)
AB
       3-ethyl-2-methyl-3-(2",4",5"-trimethoxy-phenyl-1-(2',4',5'-
       trimethoxy)phenyl-1-(2',4',5'-trimethoxy)phenyl-1-propene and a process
       for the preparation of high purity, higher yield neolignan,
       \alpha-asarone, 2,4,5-trimethoxy-phenyl propionone from \beta-asarone
       or \beta\text{-asarone} rich Acorus calamus oil containing \alpha and
       \gamma-asarone by hydrogenating and dimerizing by treatment with DDQ in
       presence of an organic acid.
L12 ANSWER 7 OF 8 USPATFULL on STN
AN
       2003:184167 USPATFULL
       Process for the preparation of pharmacologically active \alpha-asarone
TI
       from toxic \beta-asarone rich acorus calamus oil
       Sinha, Arun Kumar, Himachal Pradesh, INDIA
IN
       Joshi, Bhupendra Prasad, Himachal Pradesh, INDIA
       Acharya, Ruchi, Himachal Pradesh, INDIA
       Council of Scientific & Industrial Research, New Delhi, INDIA (non-U.S.
PΑ
       corporation)
       US 6590127
                           В1
                                20030708
PТ
ΑI
       US 2002-107844
                                20020328 (10)
DТ
       Utility
FS
       GRANTED
       Primary Examiner: Richter, Johann; Assistant Examiner: Witherspoon,
EXNAM
       Sikarl A.
       Foley & Lardner
LREP
       Number of Claims: 22
CLMN
       Exemplary Claim: 1
ECL
       8 Drawing Figure(s); 8 Drawing Page(s)
DRWN
LN.CNT 1440
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a process for the preparation of high
AB
       purity and yield \alpha-asarone, trans 2,4,5-trimethoxy cinnamaldehyde,
       2,4,5-trimethoxy-phenyl propionone, from \beta-asarone or
       \beta\text{-asarone} rich Acorus calamus oil containing \alpha and
       \gamma\text{-asarone} by hydrogenating, followed by treatment with DDQ with or
       without solid support of silica gel or alumina in dry organic solvent
       and \alpha-asarone can also be obtained by treating the hydrogenated
       product of \beta-asarone or \beta-asarone rich Acorus calamus with DDQ
       in an aqueous organic solvent to obtain an intermediate 2,4,5-trimethoxy
       phenyl propionone, which in turn is reduced with sodiumborohydride to
       obtain the corresponding 2,4,5-trimethoxy-phenyl propanol and followed
       by final treatment with a dehydrating agent.
L12 ANSWER 8 OF 8 USPATFULL on STN
       2002:243851 USPATFULL
AN
       Process for the preparation of substituted trans-cinnamaldehyde, a
TI
       natural yellow dye, from phenylpropane derivatives
       Sinha, Arun Kumar, Palampur, INDIA
IN
       Joshi, Bhupendra Prasad, Palampur, INDIA
       Dogra, Ruchi, Palampur, INDIA
                                20020919
                           A1
PΤ
       US 2002133045
       US 6566557
                           B2
                                20030520
       US 2001-805832
                                20010314 (9)
                           A1
AΙ
DТ
       Utility
       APPLICATION
FS
       Allan Ratner, Ratner & Prestia, One Westlakes, Berwyn, Suite 301, P.O.
LREP
       Box 980, Valley Forge, PA, 19482-0980
       Number of Claims: 23
CLMN
ECL
       Exemplary Claim: 1
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4 Drawing Page(s) DRWN LN.CNT 1038

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to the preparation of substituted trans-cinnamaldehyde, a natural yellow dye from Phenylpropane derivatives having R.sub.2-R.sub.3-R.sub.4-R.sub.5-R.sub.6 substitution, wherein R.sub.2 to R.sub.6 equal or different, being hydrogen or hydroxy or acyl or halogen or alkyl or heterocyclic or aryl or dioxymethylene or alkoxy groups, etc., by oxidizing the said phenylpropane derivatives using a oxidising agent such as 2,3-dichloro-5,6-dicyano-1,4benzoquinone (DDQ) or p-chloranil or pyridinium chlorochromate (PCC) or tBuOOH or or CrO.sub.3 with a catalytic amount of inorganic/organic acid or alumina, celite, and silica gel as a solid support for microwave irradiation and thus substituted trans-cinnamaldehydes, a natural yellow dye, are obtained in high yield ranging from 68-82%.